

## **ABSTRACT**

The invention is a series of soft lithographic methods for the microfabrication of biopolymer scaffolds for use in tissue engineering and the development of artificial organs. The methods present a wide range of possibilities to construct two- and three-dimensional scaffolds with desired characteristics according to the final application. The methods utilize an elastomer mold which the biopolymer scaffold is cast. The methods allow for the rapid and inexpensive production of biopolymer scaffolds with limited specialized equipment and user expertise.